



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,987	01/04/2002	Edmund W. Figiel	1994.CRG	8730

7590 04/24/2003

Cynthia L. Foulke
NATIONAL STARCH AND CHEMICAL COMPANY
10 Finderne Avenue
Bridgewater, NJ 08807-0500

EXAMINER

TRAN, THAO T

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 04/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

	Application No. 10/039,987	Applicant(s) FIGIEL ET AL.
	Examiner Thao T. Tran	Art Unit 1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) Interview Summary (PTO-413) Paper No(s) _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claims recite “an organic anhydride component” and “an amount effective to improve the set speed of the adhesive”, which in and of themselves are so broad as to be incomprehensible.

The phrase “an organic anhydride” is not specific as to any organic anhydride. The innumerable organic anhydrides included in the concept of “an organic anhydride” would not enable one of ordinary skill in the art to know what may be embraced by this recitation for use in this invention. The term “organic anhydride” is not art-recognized for any particular class or grouping of compounds, nor is it a proper Markush group to which members are known or easily ascribed. The same arguments are also presented for “an amount effective to improve the set speed of the adhesive” in terms of the amount of the organic anhydride added to or already present in the adhesive.

The determination of what may be usable in this capacity would require the undue burden of experimentation on the part of the artisan.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1711

3. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 9 are indefinite because it does not define specifically what the presently claimed adhesive is. The claim contains an adhesive that comprises an organic anhydride, which renders the claim omnibus and indefinite. Specific definition of the adhesive is required.

Claims 1 and 9 are further indefinite because it is unclear to the examiner whether the organic anhydride is added to or is already present in the adhesive.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 1711

5. Claims 1-5, 7, 9-13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Nguyen et al. (US Pat. 5,716,441).

Nguyen teaches an adhesive composition and method of making, the adhesive comprising starch modified by 3% by weight of octenyl succinic anhydride; a crosslinking agent; the adhesive composition is used in various applications such as paper bonding and case and carton (see col. 4, ln. 7-19; Example 1).

Although the reference is silent with respect to the improving set speed of the adhesive, since the reference teaches the same composition, the reference's composition would inherently have the same properties as those in the instantly claimed invention.

6. Claims 1-5, 7, 9-13, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Lydzinski et al. (US Pat. 6,280,515).

Lydzinski teaches an adhesive composition and method of making, the adhesive comprising a polysaccharide, such as a crosslinked starch modified with 3% by weight of an organic anhydride, such as octenyl succinic anhydride; polyvinyl alcohol; crosslinking agent, such as calcium chloride (see col. 3, ln. 1-18, 46-60; claims 1-3, 7, 12-14).

Although the reference is silent with respect to the improving set speed of the adhesive, since the reference teaches the same composition, the reference's composition would inherently have the same properties as those in the instantly claimed invention.

The adhesive is used in various applications, such as making paper laminating, wood bonding, tissue and towel manufacture (see col. 3, ln. 33-39).

7. Claims 1-5, 7, 9-13, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Eden et al. (US Pat. 6,379,447).

Eden teaches an adhesive composition and method of making, the adhesive composition comprising crosslinked starch modified with 5% by weight of octenyl succinic anhydride; crosslinking agent (see col. 8, ln. 47-52; claims 1, 6-7).

Although the reference is silent with respect to the improving set speed of the adhesive, since the reference teaches the same composition, the reference's composition would inherently have the same properties as those in the instantly claimed invention.

The adhesive is used in various applications, such as making paper laminating (see col. 7, ln. 1-15).

8. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Figiel et al. (US Pat. 6,387,475).

Figiel teaches an adhesive composition and method of making, the adhesive composition comprising crosslinked starch modified with 3% by weight of octenyl succinic anhydride; ethylene vinyl acetate; poly vinyl alcohol; crosslinking agent, such as polyvalent salt activator (see col. 4, ln. 1-15; Examples III, IV; Table 1; claims 1-6, 13-20).

Although the reference is silent with respect to the improving set speed of the adhesive, since the reference teaches the same composition, the reference's composition would inherently have the same properties as those in the instantly claimed invention.

The adhesive is used in various applications, such as making a coreless paper rolls (see abstract; claims 18-20).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 6, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lydzinski as applied to claims 1 and 3 above.

Lyzdinski is as set forth in claims 1 and 3 above and incorporated herein.

Lyzdinski teaches the adhesive composition comprising polyvinyl alcohol (see col. 3, ln. 1-6). The reference further teaches the adhesive composition comprising ethylene vinyl acetate in the prior art (see col. 1, ln. 23-29).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have included ethylene vinyl acetate into Lydzinski's composition, because the prior art teaches that the use of ethylene vinyl acetate would enhance stability of the adhesive.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 703-306-5698. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone numbers for the

Art Unit: 1711

organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

tt

tt

April 20, 2003



NATHAN M. NUTTER
PRIMARY EXAMINER
GROUP ~~100~~ 1711